

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

1-14. (Canceled).

15. (Currently Amended) A method of producing a holey optical fiber preform, comprising:

forming a porous preform having a longitudinal direction and a density in a range from 0.25 to 0.8 g/cm<sup>3</sup>; and

before consolidation of the porous preform, forming at least one hole a pattern of holes extending through the porous preform along the longitudinal direction, wherein said ~~at least one hole~~ pattern of holes is formed by drilling the porous preform.

16. (Currently Amended) The method according to claim 15, wherein a density of the porous preform in an annular region thereof wherein ~~the at least one hole~~ is each hole in the pattern of holes to be formed has a maximum variation of 4%.

17. (Previously Presented) The method according to claim 15, further comprising submitting the porous preform to a consolidation process after said drilling.

18. (Previously Presented) The method, according to claim 17, further comprising submitting the porous preform to a dehydration process after said drilling.

19. (Previously Presented) The method according to claim 15, wherein said porous preform is a glass soot preform formed by means of flame hydrolysis, particularly a glass soot preform.

20. (Previously Presented) The method according to claim 19, wherein said glass soot preform is formed by means of an Outside Vapor Deposition (OVD) process or a Vapor Axial Deposition (VAD) process.

21. (Canceled).

22. (Previously Presented) The method according to claim 19, wherein the density of the glass soot preform is in a range from 0.5 to 0.7 g/cm<sup>3</sup>.

23. (Previously Presented) The method according to claim 15, wherein the porous preform is a gel preform.

24. (Currently Amended) A method of producing a holey optical fiber having ~~at least one hole~~ a pattern of holes extending in a fiber longitudinal direction, comprising:

forming a holey optical fiber preform by means of the method according to any one of claims 15 to 20 or 22 to 23; and

drawing the holey optical fiber preform.

25. (Withdrawn) A device for drilling holes in a porous preform, comprising:  
a porous preform supporting structure, comprising an arrangement of porous preform holders adapted to engage an outer surface of the porous preform for keeping the porous preform steady;

a drill for actuating at least one drilling bit; and

a position adjustment structure for adjusting a relative position of the porous preform and the drill.

26. (Withdrawn) The device according to claim 25, wherein the porous preform holders have an active surface intended for contacting the porous preform, said active surface being made of an elastomeric material, rubber, or silicone rubber.

27. (Withdrawn) The device according to claim 25, further comprising a tilt mechanism adapted to tilt an axis of the porous preform supporting structure with respect to a reference plane.

28. (Withdrawn) The device according to claim 25, further comprising at least one drilling mask, having formed therein a respective predefined pattern of holes, said mask being associatable with the porous preform for guiding the drilling of holes.